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ABSTRACT

This paper argues for a dialectical conception of theory that avoids the problem of trying to yoke together theories that embody conflicting epistemological and idealogical concerns in any unified way. Called a "cognitive-social epistemic," this dialectic is a theoretical construct that subsumes a family of cognitive and social theories that accounts for how writing gets produced. This construct acknowledges the power of social and ideological forces that can circumscribe thought and action; at the same time, it recognizes the critical role that individuals play in the construction of meaning through manipulating a community's symbols. Embedded in these two broad conceptions of a dialectical theory of composing are three principles that emphasize systematic inquiry and reflexivity in both theory and research. First, the development of theory depends on critical reflection, particularly upon the conceptual frameworks and methods that motivate work in composition. Second, the development of such a construct depends in large part on fine-grained observations of the processes that are of interest, observations that are meaningful to both teachers and researchers. And third, the adequacy of explanations can be measured by the extent to which the theories reflect the social contexts studied, not by how well they fulfill the ideological concerns that a given theorist might privilege. A review of social theories of knowledge in composition and the kind of teaching that has grown out of these theories focuses on (1) a weakness in the antifoundationalist program (which deconstructs categories of truth but gives no clear foundation or criterion for action); and (2) a need to realign discussions of literacy and literate practice to find a way to talk about how individuals create knowledge that leads to action. (Eighty-one references are attached.) (KEH)

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TOWARD A DIALECTICAL THEORY OF COMPOSING[1]

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In recent years, theorists, critics, and researchers in English studies have emphasized the role that social structures play in shaping individual knowledge and in constraining the ways individuals can contribute to the conversations of a given field. As a result of what has become a fairly diverse body of research and theory, we have become increasingly aware of the extent to which fields outside of English studies have, for some time now, focused upon issues concerning the nature and source of knowledge, emphasizing the social construction of knowledge (Bruffee, "Social Construction"). Such a position has emerged from theoretical studies in the sociology of knowledge (see, for example, Berger and Luckmann) and the sociology of science (see Gilbert and Mulkay; Kuhn; Latour), studies motivated by an insight that has become fairly commonplace: thought and social structures are integrally related (see Goff). Sociological analysis has also provided many of us in English with a vocabulary and conceptual framework for describing and analyzing community formation and a sense of the contingent nature of knowledge.

Taking these insights further, theorists in composition, such as Berlin ("Rhetoric and Ideology"), Bizzell ("College Composition"), and Knoblauch, have focused on the institutional structure of school and society, foregrounding the political dimension of a social theory of knowledge and aligning social theory to issues surrounding literate practice and pedagogy. Importantly, their critique of school and culture calls attention to the institutional practices that disempower and marginalize students, the role that history and ideology play in knowledge formation, and the kind of teaching that has the potential to make students active, critical participants in both school and society. In curricula described by Shor and Berlin ("Rhetoric and Ideology"), for example, students learn that language use is an eminently political and social act linked to the ways individuals structure meaning in an ongoing dialogue with others. And, language has a dialogic quality, voices struggling to be heard, that is always value-laden, always ideologically charged. These teachers claim that by demystifying forces of domination in culture and society through analyzing language, students have the potential to resist and transform those forces which suppress their voices. In the end, students engage in a process of becoming self-critical about the historically constructed nature of their experience.

Social theorists welcome the recent shift in composition studies from a study of cognition to writing as a social activity, in part because it can, as Chase suggests, "lead us to focus on writing as a form of cultural production linked to the processes of social empowerment" (14). Such an approach to both a theory of knowledge and literate practice is important, particularly in the challenge it has posed to traditional conceptions that locate knowledge in mental structures. At the same time, social theories of knowledge, at least those linked to the teaching of writing, are limited in their failure to account for how individuals actively construct their own experiences within culturally organized practices, make original contributions, or affect social structures. Issues surrounding human agency, empowerment, and authority in the teaching of writing, however, appear to underscore the need to examine the relationship between individual cognition and social context. Indeed, there is a certain irony in dismissing the study of individual cognition as a valid area of exploration in composition research, since theorists such as Berlin, Bizzell, and Bruffee concern themselves with agency and reflection. Berlin, for example, privileges political *action* (my emphasis) and "the ways in which knowledge comes into existence" ("Rhetoric and Ideology" 489). Similarly, Bizzell wishes to foster the kind of *critical reflection* (my emphasis) in students that will enable them to inspect the political and ethical dimensions of the "hidden curriculum" ("Cognition, Convention, and Certainty" 239), while Bruffee wishes to help students develop "the capacity to seek out and understand alternative perspectives" ("Social Construction" 788).

Even if one were to agree with a strong social constructionist view that individuals are social constructs, theorists such as Volosinov speculate that subjectivity results from a dialectical interplay of an individual consciousness and ideological forces, an observation that suggests that a cognitive and social framework can and should accommodate one another (Baumlin and Baumlin 246). From another perspective, culture is constituted by values, ideologies, and by its symbols--of power, kinship, and family--that give individuals the capacity to communicate with one another, to make meaning. I would argue with Geertz (*Interpretation of Culture*) that these symbols, manifested in language, provide a medium for individuals to express their attachment to a community without compromising their individuality. After all, social action is invested with individual will and intention, each based on interpretations of different social situations. Culture is not simply imposed as a body of social fact or as a system of regulating norms, but must itself be understood as a symbolic construct. Thus, a community's meaning varies with its members' unique orientation to it, constructed and reconstructed through the innovative role of authors (cf. Kaufer and Geisler 288).

It follows that individuals and social structures must be understood in terms of the other, particularly if we are interested in writing as a form of cultural production. It also follows that we cannot simply banish issues that focus on cognition on the basis of political and epistemological assertions, not if our interests ultimately rest with the individual students we wish to empower. Nonetheless, this is precisely what one group of social theorists in composition appear to have done in creating a set of troubling dichotomies. Theorists have drawn distinctions between "inner-directed" and "outer-directed" theories of composing (Bizzell, "Cognition, Convention," and Certainty"), between "foundationalists" (often used interchangeably with cognitivists) and "antifoundationalists" (Bizzell, "Foundationalism and Antifoundationalism"; Bruffee, "Social Construction") and between "cognitive" and "social-epistemic rhetoric" (Berlin, "Rhetoric and Ideology"). These distinctions draw attention away from concerns about intention, innovation, and action to the historical and cultural situations that determine action, even though it may be in our interests to develop theories that account for the interactions between agency and history. Moreover, these distinctions tend to simplify the goals of "the cognitive position" to a set of principles that belie the richness, complexity, and aims of cognitive theory: "For cognitive rhetoric, the structures of the mind correspond in perfect harmony with the structures of the material world" (Berlin,"Rhetoric and Ideology" 480); "...inner directed theorists seek a new set of principles for our discipline that will raise their arguments...'above mere ideology'" (Bizzell, "Cognition, Convention, and Certainty" 235); "...one of the most important assumptions of cognitive thought is that there must be a universal foundation, a ground, a base, a framework, or structure behind knowledge or beneath it, upon which what we know is built, assuming its certainty or truth" (Bruffee, "Social Construction" 776).

One would be hard pressed to find the values expressed here in the theories put forth by cognitive theorists in composition. After all, Flower and Hayes' work in cognition is and has been closely tied to an Aristotelian conception of rhetoric that is social in nature, recognizing that individual consciousness is affected by social structures, that meaning is co-constructed by both audience and rhetor in a given situation, and that the aim of rhetoric is action within society and culture (see also Hayes and Flower). Inasmuch as cognitive researchers and theorists (e.g., Flower, *et al.*; Flower, "Cognition, Context") locate the individual as a starting point in their analysis, they are foundationalists, perceiving agency, subjectivity, and will as a basis and criteria for action. Thus, Flower and Hayes' descriptive model, for example, attempts to account for the ways individuals produce knowledge within different contexts. Moreover, responding to claims that cognitive research is primarily concerned with achieving certainty, somehow rising above ideology, Flower ("Cognition, Context") argues that theory-based research in composition is "never disinterested," driven by the problems we pose, the questions we raise based on the specific theoretical orientation of our work, and a need to "explain something we want to know." Data are interpreted within a theoretical framework that recognizes the probabilistic nature of claims and affirms the socially constructed nature of knowledge.

One could argue, and rightly so, that the Flower and Hayes model does not specify features of context that influence the choices and decisions writers make in composing. Nor does their model acknowledge historical, cultural, and ideological issues that social theorists, such as Berlin, Bizzell, and Knoblauch address as essential factors in discussing literacy. But as theorists in sociology (e.g., Brown), anthropology (e.g., Clifford and Marcus), and rhetoric (Nelson, Megill, and McCloskey) argue, no one theory can be expected to account for all levels of knowledge that interest us. At issue is not necessarily what cognitive or social theories lack, but how well a given theory and research agenda fulfill the goals of what it tries to account for. And, given social theorists' goals as teachers, one might ask how well a social theory specifies the kind of knowledge that will enable students to become agents. Whether cognitive theory should be more social or whether social theory should somehow be more cognitive may be a function of the shared goals theorists a research community defines for itself.

Regardless of how cognitive theorists position themselves, epistemologically or ideologically, however, my intention in this article is *not* to defend cognitive theory because there is really no unified position to defend, just as there is no unified social theory to which social theorists in composition adhere. In fact, it may be an error to argue for a unified theory at all, since no one theory is adequate by itself to explain all of the factors--cognitive and social--that interest us in our study of literacy[2] and literate practice (cf. Brown). Instead, I argue that as the pendulum has swung in composition studies from a focus on cognition to social structures, we have begun to lose sight of how individuals reflect, form judgments, make choices, and construct meaning within culturally organized practices. It is time to reconsider the role of individual cognition, particularly in the interests of developing sound theories of knowledge upon which to base teaching. Moreover, rather than treat cognitive theories that account for the individual construction of meaning as somehow oppositional to social theories of knowledge, we might think about how these competing theories stand in a dialectical relationship to one another. Seen in this way, cognitive and social theories can be mutually informing, but they can also call into question what researchers, theorists, or teachers unquestioningly accept as true -- epistemologically, ideologically, or methodologically. A dialectical conception of theory avoids the problem of trying to yoke together theories that embody conflicting epistemological and ideological concerns in any unified way.

I would like to call this dialectic a cognitive-social epistemic, a theoretical construct that subsumes a family of cognitive and social theories that accounts for how writing gets produced. A cognitive-social epistemic acknowledges the power of social and ideological forces that can circumscribe thought and action; at the same time, it recognizes the critical role that individuals play in the construction of meaning through manipulating a community's symbols. In addition to these two broad conceptions of a dialectical theory of composing, there are three key principles that such a concept embodies: first, the development of theory depends on critical reflection, particularly upon the conceptual frameworks and methods that motivate our work in composition. Second, the development of such a construct depends in large part on fine-grained observations of the processes that interest us, observations that are meaningful to both teachers and researchers. And third, the adequacy of our explanations can be measured by the extent to which our theories reflect the social contexts we study, not by how well they fulfill the ideological concerns that a given theorist might privilege. How well, one might ask, does a theory fulfill the goal of what it sets out to explain? More specifically, to what extent does a given theory provide a plausible and descriptive framework for understanding political action, for example? Is there support for the claims we make about the explanatory power of our theories?

In what follows, I review social theories of knowledge in composition and the kind of teaching that has grown out of these theories. In doing so, I focus on two concerns that call attention to the inadequacy of a position that denies the role of individual cognition, particularly when the goals of that position stress teaching: the first addresses a weakness in *the* antifoundationalist program, one that deconstructs categories of truth but leaves us without a clear foundation or criterion for action, at least as it is presented in composition. To be fair, social theorists do not necessarily embrace a single set of assumptions in describing the socially

constructed nature of knowledge. In fact, they base their notions on significantly different epistemological and ideological frameworks to explain the socially constructed nature of knowledge. This is an important point, one that I develop in the following section of this article, in view of the fact that "the social" is a critical referent in the debate surrounding the limitations of cognitive-based theories of composing and what I have termed a cognitive-social epistemic. A common denominator, however, is that social theorists in composition have not reflected upon the implications of dismissing the role of individual cognition from discussions of agency, consciousness, and learning.

The second concern focuses upon a need to realign our discussions of literacy and literate practice in order to find a way to talk about how individuals create knowledge that leads to action. Here I argue that social theories in composition studies account for only part of the knowledge learners need to have in order to develop a sense of agency. While I point out the value of social theories and the teaching practices that have grown out of this work, I suggest that there are weaknesses in social theorists' failure to discuss how individuals acquire knowledge, or how task and context constrain students' performance.

To fulfill our goals as teachers entails understanding precisely the extent to which individuals actively construct meaning. This entails making a major shift in our attention from teaching to the nature of learning. In doing so, we can begin to develop theoretical perspectives and a research agenda that specify the kinds of knowledge learners need to have to become agents and authors who have the potential to contribute to the growth of knowledge or create change. Again, the adequacy of a theory--or a set of theories--particularly one that informs practice, should yield some understanding about consciousness and agency and account for the role that social structures play in knowledge construction. Myers' and Bazerman's (e.g., "Physicists Reading Physics") research in the sociology of science provide important insights and a useful starting point for discussing the nature of this interaction. Based on close, systematic observation, both Myers and Bazerman have begun to form a body of theory that explains how individuals negotiate the knowledge claims of a discipline in order to make novel contributions to their fields.

The theoretical, empirical, and pedagogical concerns I lay out above and in the foregoing argument reflect my sense that those of us who have investments in bringing basic writers in from the margins, in building curricula, or in conducting research are at a crossroads in composition where social and cognitive theories are in conflict. But our investments in individual students--for example, helping them explore and negotiate the demands of academic or disciplinary writing--provide a sense of urgency for creating a vision in which social and cognitive perspectives work together. We should not have to choose between competing theories on ideological and epistemological grounds. This is not to suggest that the conflicts between theories of knowledge or composing are not real. What I do suggest is that theories on which we base our research and teaching need to be well specified, so that we can translate these theoretical accounts into action. Further, the development of theory can help guide inquiry into literacy without creating false dichotomies that direct our attention away from seeing our students as active learners who bring a legacy of schooling and culture that shapes what and how they learn.

THE ANTIFOUNDATIONALIST PROGRAM REVISITED

In laying out the tenets of what he terms social construction theory, Bruffee presents such a theory as relatively unified without reflecting upon the epistemological and ideological character of different social theories of knowledge. Drawing upon Rorty's work (*Philosophy and the Mirror*), he suggests that the common denominator of the "antifoundationalist" program is that it challenges traditional Cartesian conceptions of rationality that form the philosophical basis of cognitive science (cf. Gardner 49-54). Philosophers beginning with Descartes explain the foundations of knowledge in a study of mental processes and of the activity of representation, confident that to know is to represent accurately what is outside of the mind. Rorty and others argue from an antifoundationalist position that we cannot account for the validity of our beliefs by examining the relationship between ideas represented "clearly and distinctly" in the mind and

their objects in the world. Justification of belief is a social process, an ongoing conversation whereby we negotiate and renegotiate knowledge claims in an effort to solve the problems a community confronts (Rorty, "Hermeneutics"). Knowledge results from acknowledgment and mutual agreement among knowledgeable peers, a view that places faith in the power of reason and dialogue as a basis for community life. Indeed, Rorty's antifoundationalism has been applauded in English studies, particularly by Bruffee ("Liberal Education and the Social"; "Liberal Education, Scholarly Community"), because it fosters a critical attitude toward any claims of truth that are grounded in objective principles of certainty and logic.

Yet, as Giroux points out, Rorty's program does not leave us with either the political or ethical grounds for action, insulating his antifoundationalist program from issues of power, struggle, and individual will (*Schooling* 60-6). Clearly, issues surrounding power and struggle are the very issues that have preoccupied social theorists like Berlin, Bizzell, and Knoblauch, thus setting them apart from Bruffee's agenda as a social theorist in composition: finding theoretical justification for collaborative learning and validating liberal humanistic values. In "Liberal Education and the Social Justification of Belief," Bruffee discusses curricular reform based on shifting perceptions of knowledge. In this curriculum, students would study "what the community of liberally educated people considers to be the best that Western culture has to offer" in order to "take part in the conversation of mankind" (110, 108). His emphasis on community as a consensus-building enterprise embraces the functionalist's perspective that human cooperation is presumed to be the natural outcome of socialization within a common value system (cf. Archer). As Brown points out, such a view "presupposes a system of socially shared symbols and expectations" (27). In contrast, Berlin, Bizzell, and Knoblauch set forth theories that are decidedly Marxist, each providing an ideological critique of modern capitalist society and the institutional infrastructure that disempowers and marginalizes students. From this perspective, change does not occur through individual will, consciousness, and intention, but through laws that are independent of individual consciousness. Given the theoretical basis for their work, it should not be surprising that neither Berlin, Bizzell, nor Knoblauch have provided teachers and theorists with a viable political agenda or established any criteria from which individuals might act in creating change.

I want to make two points in drawing a distinction between Marxist and functionalist theoretical perspectives in order to clarify what the social is and what it is not: First, what Bruffee calls social construction theory is not a unified theory but a *family* of theories that tries to account for a wide range of problems and concerns in different fields: the function of rhetoric in forming and maintaining disciplinary communities (Berlin, "Rhetoric and Reality"; Leff; Scott, "On Viewing Rhetoric as Epistemic"), the formulation of scientific knowledge (Kuhn; Gilbert & Mulkay; Latour), the origin of interpretive strategies (Fish), and the study of culture (Geertz, *Local Knowledge*). This family of theories has provided the basis for critiquing modern epistemology (Rorty, *Philosophy and the Mirror*), cognitive theories of rhetoric (Bartholomae; Bizzell, "College Composition"; Cognition"; "Foundationalism"), and the goals of inquiry in modern psychology (Gergen). A related point is that cognitive theory is *not* a unified theory, but a family of theories that attempts to explain the process of composing (Flower and Hayes) and comprehending (Kintsch and van Dijk), the nature of expertise in different disciplines (Lesgold), general problem solving (Newell and Simon), and learning (Bransford). Cognitive researchers have also sought to develop models of cognition (Anderson; McClelland and Rumelhart).

Secondly, although social theorists have lost sight of the role individual cognition plays in the construction of knowledge, social theorists such as Rorty (*Philosophy and the Mirror*) recognize the legitimacy of examining the process of how people negotiate their worlds, a process mediated by constructing mental representations. Geertz, too, emphasizes studying the practices of everyday living, interpreting the experiences of the individual through a study of art, religion, stories, and the like. The analysis of culture, however, is anything but an experiment in search of laws (see Gardner 356). Thus, what theorists appear to challenge is any claim that one's views about the world are true, not necessarily the validity of studying cognition. This is an important distinction, one that Bruffee does not explain in his discussions about social construction theory ("Social Construction").

Having argued that cognitive and social theories are *not* unified theories, I want now to lay out more completely Bruffee's characterization of cognitive theory--more a series of unsubstantiated claims--that he sets up in opposition to the antifoundationalist program. In this way, he defines such a program in terms of what it is not. For Bruffee (see also Gergen), foundationalists, or cognitivists, appear to make three claims about the nature of knowledge: first, knowledge is foundational, a premise that posits a belief in essences, in a fixed body of knowledge. This knowledge can be verified through the building and testing of hypotheses apart from our beliefs, attitudes, and values. In this, knowledge is both a-historical and a-social. Secondly, foundationalists assert that the individual is the "measure of all things," the matrix of all thought, placing unlimited faith in the power of pure reason and mathematical thinking. Such a view refuses to grant consensual agreement as a criterion for knowledge. The authority of knowledge rests on the construction of a mental representation of a world that exists outside of and apart from mind. And, third, knowledge exists apart from language, so that language is merely a tool for conveying logical demonstration and proof.

The primary weakness in this characterization of foundationalist or "cognitivist" principles of knowledge is that Bruffee ("Liberal Education, Scholarly Community"; "Social Construction"; see also Bizzell, "Foundationalism") associates positivism of the nineteenth-century with empirical research in composition and science. By attending to *what* data means--the product of analysis--rather than *how* data means, he tends to misconstrue the work of empirical science as concerned with achieving absolute certainty apart from values and beliefs, a view with which many, perhaps most, scientists would disagree. Phillips, for example, has pointed out that scientists recognize the extent to which scientific inquiry and knowledge are justified socially, that induction is impossible, since the hypotheses scientists employ in research are shaped and influenced by a community's conceptual framework. Moreover, in the laboratory sciences, certainty is something to be approximated. Scientific progress, according to Gonseth, is "...not a step from certitude to certitude, from reality to reality, it is a step from provisional and cumulative evidence to further provisional and cumulative evidence" (cited in Kinneavy 109). Similarly, Flower ("Cognition, Context") argues that theory-based research in composition is "ultimately a constructive, rhetorical act," guided by the specific theoretical orientation of our work. The use we make of data in making claims about evidence, validity, and results are ultimately constrained by a research community's "stringent rules of inference." "The path we take," she points out, "will differ from other paths in the kind of argument and evidence it can generate" (296).

Together, these descriptions of empirical research underscore the probabilistic, epistemic, and contextual nature of knowledge. As Schriver observes in her recent article on theory building in rhetoric and composition,

> empirical knowledge is a product of a dialectic which takes place among a speaker, an interpretive community or social group in which the speaker is trying to contribute, and the historical, political, material, ideological, and situational context in which the speaker is working (272).

Knowledge is both an individual and a social construct "influenced by particular communities' belief systems, work agendas, and agendas about what is important to study" (273).

As an alternative to a seemingly disinterested view of knowledge, Bruffee turns to social construction theory--to social practice and language--as a way to account for the construction of knowledge. There appear to be three primary claims linked to what he terms antifoundationalism. First, these theorists argue that what a community knows can never exist apart from its own discourse, a discourse that reflects a community's values, habits of mind, and its cultural and historical situation. This view suggests that language constitutes reality. Though Bruffee sidesteps the political or ideological implications of such a view, he points to the intertextual or dialogic quality of discourse, heightening our awareness that language is ideologically charged. Bakhtin, for example, theorizes that "the word in language is half someone else's...the word does not exist in neutral and impersonal language..., but rather it

exists in other people's contexts, serving other people's intentions" (293-4). Indeed, language carries with it its own history tied to other contexts and ideological assumptions (Schuster). At the same time, Bakhtin underscores the individual construction of meaning within a discourse tradition, speculating that language is also accented as "individual utterance" and intentional expression" through an act of appropriation (293). From this perspective, a qualified version of social construction theory may very well include an agenda that accounts for volition and personal authority. Secondly, knowledge, from a social constructionist's perspective, is intersubjective, resulting from decision and action made in response to specific situations, issues, and problems shaped by historical and social forces. Knowledge is not discovered in an empirically verifiable material world. Rather, it is created and continually tested in the context of an interested public which seeks to solve the problems it faces.

Thus the final claim is that logic and demonstration as a means for establishing truth, knowledge, and authority are replaced by what a number of theorists call epistemic rhetoric. Such a rhetoric consists of identifying problems and establishing *stasis*, each leading to the formulation of questions and heuristic procedures to guide inquiry that seeks agreement in an immediate social context (see Scott, "On Viewing Rhetoric as Epistemic"; "On Viewing Rhetoric as Epistemic: Ten Years Later"). Though Bruffee does not make this point, the constructive and social nature of meaning making is embodied in epistemic rhetoric and finds its roots in the classical notions of *kairos* and *stasis* (see Carter) and in the new rhetoric (see Young, Becker, and Pike). A relativistic or intersubjective conception of knowledge--the hallmark of social construction theory--is not without its historical and philosophical antecedents.

TEACHING FROM A SOCIAL PERSPECTIVE: NEW DIRECTIONS AND SOME LIMITATIONS

Social theories focus our attention on the ontological status of knowledge, on modes of inquiry and the criteria for validity that justifies true belief in different disciplines. How is knowledge constructed, theorists ask, and can there be certainty in knowledge? Social construction theorists also force educators and teachers--if only implicitly--to ask how practitioners in a field learn its ways of knowing. What factors are involved?

However, to develop a more integrated theory of composing--or an integrated set of theories--we need to shift the problem away, momentarily, from a singular focus on the ontological status of knowledge to actual practice, to the historical forces, social processes, and immediate rhetorical situations that shape the making of knowledge in academic communities. Continued focus upon epistemological and ideological concerns in the formation of knowledge can help us account for ways that a disciplinary community influences thought, but we also need to account for the specific nature of academic and disciplinary work. From this perspective, social theory--not necessarily social construction theory *per se*--is relevant to educators, researchers, and teachers in four ways: first, social theory calls attention to the nature of disciplinary knowledge; second, it calls into question traditional ways of knowing and the role of the individual in contributing knowledge, thus forcing us to reassess theory and teaching practice; third, reassessment of teaching has contributed to redefining what it means to teach literate behaviors; and, finally, this body of theory enlarges our notion of context, pointing to the historical, social, and ideological forces that shape knowledge. Evidence of the first two points should be apparent from the discussion thus far. Therefore, I will only elaborate on ways that social construction theory helps us think about teaching and contexts that shape knowledge. In acknowledging the value of teaching from a social perspective, however, I also point to the limitations of any perspective that fails to account for, or even acknowledge, individual learning strategies.

Bizzell ("Cognition, Convention") has argued that educational problems associated with language should be understood as difficulties with joining unfamiliar discourse communities, not simply as difficulties associated with thinking. Inasmuch as we need to examine cognitive factors, she asserts that we need to take a social perspective as well, finding patterns of

language use and reasoning that are common to a disciplinary or interpretive community. Therefore, the teaching of literate behaviors consists of familiarizing learners with certain forms and conventions in academic communities, as well as the cognitive strategies or skills that will enable them to negotiate complex academic tasks. At the same time, I would add that learners must understand the conceptual structures that govern the organization of information in a given field, modes of inquiry, and ideas about ways in which *truth* is determined in a field (Shulman).

Based on these perspectives, teachers have sought to initiate students into the ways of knowing of a discipline through imitating the commonplaces of a discipline (Bartholomae) and analyzing the texts of a given field (Moore and Peterson). After all, texts stabilize and standardize an image of knowledge, making invisible forces that constrain the production of discourse analyzable. Further, there is an implicit faith that by "immersing" students in "academic knowledge/discourse communities..." they will be able to "write from within those communities" (Reither 624). Others have not only made discourse analysis a part of their curriculum, but have invited students to examine directly the ways in which knowledge communities are formed and maintained, the ways judgments are made in a field, and the modes of inquiry that characterize the work of a given field (see, for example, Bruffee, "Liberal Education and the Social"; Porter). To some degree, each of these approaches attempts to objectify discourse communities as discrete and analyzable, suggesting that students can gain entry into disciplines if they learn the forms and conventions. Critics (see Knoblauch), however, argue that discourse communities are not subject to analysis in quite the same way as texts are and that the focus on forms and conventions reinvigorates a study of modes of discourse, the centerpiece of current traditional rhetoric. Instead, they urge educators to consider the political, historical, rhetorical, and ideological dimensions of knowledge, engaging students in a critique of ideology and culture, of the hidden forces of institutional and social structures that shape thought and give meaning to our lives. To achieve this end, students need to develop a sense of the cultural *Text* that circumscribes the production of texts, developing a knowledge of both cultural and generic codes embodied in texts (cf. Scholes).

Indeed, theorists like Foucault ("Archaeology"; "Discipline") have suggested that the production, maintenance, and distribution of knowledge are not merely constrained by the forms and conventions of a discipline. Historical and ideological forces also influence, perhaps circumscribe, the questions we raise, the methods we use, and the very content we focus upon. As an illustration, we can look to historical accounts made by Ohmann and Callahan. Both have focused on issues of economic and social instability and the rise of monopoly capital in the United States at the end of the nineteenth century as a way to explain curricular reform and the nature of educational research. Social upheaval threatened homogeneity of thought, so that educators turned to the study of literature as a way to maintain certain values--for example, permanence and tradition--to insure that students were *culturally literate*. Of course, the study of literature had been in place in the English curriculum, serving liberal humanistic values that emphasized the role of genius in learning and fostered the romantic ideal of a free self rising above the struggles of society. The study of great art, it was agreed, could elevate the intellectual spirit of young scholars. Corporate interests, however, insisted that universities adopt a practical/utilitarian approach to education, teaching *skills* like writing as a way to produce a managerial class that would ultimately gain power and privilege, but only on the margins of monopoly capitalism. Such a curriculum emphasized propriety in discourse, civic responsibility, and called attention to a fundamental tension between the practical world of work and the theoretical world of liberal culture, between work and leisure. The university simply reproduced the institutional structure of society. Moreover, in focusing on skills, educators made a clear distinction between language and reality, suggesting that language was merely a tool for communicating a fixed reality that existed apart from human practice and not for creating knowledge.

Corporate interests and principles of scientific management also influenced research in education: how to make teaching more efficient. As Rose points out, research "focused on the particulars of language, especially on listing and tabulating error" (344), an agenda informed

by positivistic assumptions about the nature and source of knowledge, motivated by a perceived need to standardize language use in the United States, and calculated to provide teachers with a well-defined body of knowledge for which their students would be held accountable.

Social epistemic rhetoric, with its emphasis on the intersubjective and linguistic nature of knowledge construction and material and historical processes, challenges teaching practice and research that locates knowledge in human consciousness and in fixed essences that exist apart from human activity (Berlin, *Rhetoric and Reality* ; "Rhetoric and Ideology"; cf. Leff; Scott, "On Viewing Rhetoric as Epistemic"; "On Viewing Rhetoric as Epistemic: Ten Years Later"). In addition, viewing knowledge as a site of ideological conflict, social epistemic rhetoric seeks to demystify political, economic, and social arrangements that inform educational practices that enforce a particular way of seeing the world, practices that alienate and disempower those who do not contribute to consensus. In place of teaching discrete skills or the expressive function of written language, educators like Berlin ("Rhetoric and Ideology") urge that we "situate students in a social process, " engaging them in a radical critique of ideology in order to help them "identify the ways in which control over their lives has been denied them..." (490). A developing awareness of how language serves economic and political interests has the potential to liberate students as they develop a critical consciousness of how social processes both empower and marginalize. In turn, Berlin and others (see, for example, Shor) suggest that students can use this knowledge to resist the social and political practices that deny access to power and control.

Knoblauch has also argued that students should "subject the institutional reality of school itself to scrutiny in the context of other social realities" in order to help them develop critical consciousness (137). Yet, he recognizes, if only implicitly, that empowering students also consists of helping them to amass the kind of capital that will enable them to understand modes of inquiry and processes of composing that are privileged in the academic community. In these ways, students both learn the character and expectations of forming arguments and judgments in the university and explore the assumptions underlying dominant forms of discourse.

Together, the pedagogical approaches that have grown out of social theories seek to empower students by enabling them to develop critical awareness of how institutions and language reify values that oppress and marginalize. These approaches also foster an ability to recognize that disciplinary communities embody ongoing conversations about vital issues to which students can contribute in some way, if they learn its forms and conventions. At issue is not whether students can somehow rise above conflict and the hegemonic practices that enforce a certain way of knowing. Instead, by engaging students in dialogue about the social realities of school and culture, we can help foster the development of critical awareness and reflection. For Shor, the source of Berlin's pedagogical theory, the liberatory classroom, in which dialogic replaces lecture and recitation, enables students to become "actors" who can "insert themselves in history" (98). Empowerment is the hallmark of such a classroom where students develop a sense of self through understanding how they are "shaped by the surrounding world" (98).

Yet, it is the teacher who identifies, abstracts and problematizes certain themes in this method, though eventually the teacher supposedly fades from view as students learn to thematize issues and ideas that emerge in dialogue. It is, nonetheless, the teacher who orchestrates a semiotic approach to reading the cultural *Text*, who presents models of critical analysis, and in doing so embraces a certain faith that students will make learning their own (cf. Scholes).

Inasmuch as teachers like Shor, Berlin, and Knoblauch speak of reflection, critical consciousness, and action, we do not find much specific discussion about how individual students can take ownership of their learning, or how they can negotiate the complex tasks of unmasking ideology, of becoming agents, or of learning the modes of inquiry that can potentially give students access to the disciplines they wish to join. We can provide models of critical analysis in order to "prepare students with the skills they need to pursue learning,"

immerse them in a discipline's ways of knowing, or in a social process that invites dialogue (Shor 100). But there is little to insure that students will learn to manage their knowledge about rhetoric, language, or disciplinary conventions in order to persuade others about what they see, applying, in appropriate ways, what they know in different situations. Such an issue is ignored when teachers focus primarily on the kind of knowledge students need to have in order to become agents rather than on the role that individual cognition plays in learning. The methodological approaches to teaching cultural and disciplinary knowledge do not address how individuals construct meaning, use knowledge for their own purposes, or engage in the sort of reflective processes that influence how individuals will act in a given situation.

Let me suggest something about the gap students may feel between a theory that seeks to problematize a society's discursive practices and what it actually takes to perform as agents of change. When we ask students to engage in inquiry, to locate issues and conflict, or to enter the conversations of a discipline, we expect that they will be able to recognize and understand others' points of view and to adapt what they know, even transform their knowledge for knowledgeable readers. But our expectations may not be realistic, if we consider the assumptions, strategies, and criteria students bring to the tasks we ask them to fulfill in school. Research has shown us that context cues certain actions when we ask students to write, but these actions, in response to a single assignment, are often radically different from one another. As students read and write, they invoke a unique sociolinguistic past, enacting a process that has been shaped by a legacy of schooling and diverse cultural background that dictates how they fulfill the tasks we give them (Ackerman). This suggests that learning is a *constructive* process in which students make sense of and give personal meaning to public knowledge--the shared knowledge of a discipline made explicit in texts and published papers or the shared knowledge of a course conveyed in texts and discussions. Learning, whether through reading or writing, consists of relating previous knowledge and experience to new knowledge, selecting ideas using certain relevance principles, organizing these ideas using a knowledge of structure and genre, and connecting information (cf. Spivey, "Construing"). Of course, these constructive processes of making meaning can be both novel and idiosyncratic.

The issue here is not a matter of whether an individual writer or the social context should dominate our concerns as theorists, teachers, and researchers, or what to teach on a given day. Instead, we might ask, how we can build a framework that situates cognitive skills in the context of culturally organized practices (cf. Flower, "Cognition, Context"). In answering this question, our goal would be to examine, through "theory-based observation," how both experts and students negotiate the demands of academic work, demands that require them to understand a community's codes, ideological assumptions, criteria for establishing belief, and the social purposes for writing. The motive for such a search would be to develop a multi-perspective description of the ways in which context and cognition interact--not a single vision or image of the writing process, but rigorously grounded theoretical explanations that can inform us about the processes of making meaning, of entering a discourse, and reading to write (Flower, *et al.*). In this way, we can begin to understand more completely the dialectic described in social-epistemic rhetoric, extending our conception of meaning making to a cognitive-social epistemic, one that acknowledges and explains the role of individual cognition in constructing meaning within culturally organized practices. A vision of a cognitive-social epistemic brings with it the possibility of dialogue between social theorists and researchers interested in accounting for human action, motive, and intention.

THE ROLE OF CONTEXT AND COGNITION IN SHAPING KNOWLEDGE

My reading of Bazerman's and Myers' research is that each contributes to our understanding of the constructive nature of knowledge, suggesting the possibilities of seeing how cognitive and social theories can inform one another. Based on close, systematic observation, they have, in their textual and historical studies in the sociology of science, begun to form a body of theory that has helped explain how individuals contribute to the growth and knowledge of a discipline as cognitive-social meaning makers. In their work, we see writers reflecting upon choices and options in a given rhetorical situation, developing criteria that

dictates how they adapt and transform information in light of their purpose and goals. Indeed, one could argue that the construction of meaning results from a dialectical process that consists of a complex interaction between a discipline--its ways of knowing--and readers and writers, mediated by language. But this constructive process is also the product of individuals' ability to notice important variables in a rhetorical situation, variables that change in relation to one another as writers respond to an exigency, to the motives and interests of an interested public. Seen in this way, the production of discourse is an ongoing, interpretive act in which individual cognition plays a significant role.

Myers' research has shown that communities include formal and informal networks of communicating, networks that constrain how practitioners in a field argue a position, how authors represent themselves in a text, and how they insert their claims into the accumulated body of knowledge in a field. Indeed, writers in a discipline must learn to make certain rhetorical moves if they are to enter the ongoing conversations of their field. These moves reflect an understanding of the issues and problems under discussion in a field, relevant concepts and their relationships to one another and the research programs and methodology that a community acknowledges as legitimate (see Berkenkotter, Huckin, and Ackerman). To enter the conversation, Swales demonstrates that writers in the sciences and social sciences employ rhetorical moves that establish the importance or relevance of their subject, citing authorities in a field as a way to situate their work and build on what others have done. Writers must also create a problem space, showing that there is a gap in the field, and then describe how their work can help fill that gap. Thus those who wish to contribute to the developing knowledge of a field must not only acquire content knowledge, but they must also be able to manage this knowledge within certain rhetorical and linguistic conventions, presenting one's work in terms of a discipline's consensus and using the appropriate register and syntactic constructions in a given rhetorical situation. In the end, discourse knowledge and subject-matter knowledge appear to work together in enabling practitioners in a field to position their claims and achieve voice in a conversation (cf. Ackerman).

Indeed, disciplinary communities have exclusionary power in their insistence that practitioners adhere to certain forms and conventions that govern modes of inquiry and assumptions about knowledge, marginalizing those who do not contribute to the consensus-building enterprise that maintains the work of a discipline. Implicit here is the socially determined character of knowledge, a point that Myers appears to make in describing the process of writing grants in the field of biology, a process that plays an integral part in building consensus and one that is critical to the development of scientific knowledge. After all, the social negotiation that shapes the grant-writing process defines what is considered a legitimate program of research, how knowledge is communicated, and how research is funded. Inevitably, this process reveals a discipline's ideological concerns that enforce a way of seeing the world.

In chronicling two biologists' attempts to gain acceptance in their field, Myers illustrates the extent to which researchers respond to and develop consensus as they make tactical appeals to authority, establish a theoretical base for their work, resist assertions about newness or originality, and, to an extent, reorient their projects to fit with previously existing knowledge. In adhering to a particular ideological stance, researchers are accountable to a discipline's past--to its shared concerns and shared knowledge. In this, we see how writers in a disciplinary community are part of a discourse tradition, thus calling attention to the social, historical, and intertextual nature of text production (cf. Leitch; Miller; Porter). The notion that writers produce texts within an historical tradition in a given discipline would appear to challenge the nineteenth-century Romantic conception of the individual writer working alone in his garret and a genius theory of art, at least more extreme forms of the conception.

Bazerman's research into the sociology of science (e.g., "Physicists Reading Physics") helps us to see that the formation of knowledge rests on a dialectical relationship between a community and its members, a dialectic that is mediated by language and influenced by the course of a discipline's history. However, he also argues that perceiving statements only

within the process of social negotiation ignores individuals' power of observation, their ability to contribute to the growth of disciplinary knowledge, and the ways in which individuals negotiate the complex demands of a given rhetorical situation. He identifies modes of rhetorical inquiry, describing the motivating concerns in the scientific community that trigger empirical study, how scientists represent a problem or task as it is defined by the field and in light of their own purpose and goals, and how they marshal arguments to support their claims, establishing their own voices in contributing knowledge to the field. They build networks of plans and goals that evolve as a response to the variables in a rhetorical situation, develop a criteria for success, and discover new ideas (cf. Flower, "Construction of Purpose"). More generally, they employ discourse knowledge that reflects their understanding of certain generic constraints and meta-knowledge about *what* strategies to use, *why* they might be used, and *when* they would be most appropriate.

Moreover, we see that reading and writing are constructive acts shaped by an individual's schema or personal map of the field. This mental map consists of consensual knowledge about the field, its methods and current practices, the problems on which the field is working, and the ways problems are worked out in the field. In this sense, knowledge consists of facts that a practitioner in a given field knows and a conceptual framework consisting of facts and their relation to other facts, the goal structure of a discipline, the theories underlying certain principles, and the ways of knowing that constrain how practitioners define and solve problems.

In the end, Bazerman's work suggests that social and cognitive perspectives on knowledge can accommodate one another, particularly when we consider the rhetorical nature of disciplinary knowledge. In effect, both Bazerman and Myers show the extent to which context guides cognition--an individual writer responding to an exigence, to a set of factual conditions, interests, motives, and constraints that prompt inquiry and the production of discourse in a public forum. A community can determine the ways in which writers define problems, establish goals, and formulate criteria that guide inquiry that attempts to resolve conflict and form judgments. At the same time, writers define their own goals--based on their own values and beliefs--in arguing a position. They employ their own strategies and criteria for articulating and discovering relevant problems in a relatively indeterminate situation, weigh options and make choices. Thus, just as context appears to guide cognition, cognition also mediates context in writers' managing of strategies in light of their goals and in their attempts to affirm consensus or to make a contribution that creates change (Bazerman, "What Written Knowledge Does"; Myers). Importantly, the issue in rhetorical theory is not simply a matter of whether a given rhetorical situation or a writer is dominant, but how an individual writer becomes engaged in problematic situations, creates a means for making sense of an issue, and makes a contribution in the service of a community's goals (cf. Bitzer; Consigny).

Similar insights have been made by cognitive researchers who have examined the nature of expertise (for a review of the literature, see Lesgold) and problem-solving strategies in different disciplines, where problems are often ill-defined and solutions seldom agreed upon (Reitman; Voss and Post; Voss, *et al.*). Problem solvers must not only represent the problem in terms of known information--goals, subgoals, and constraints--thus providing a structure for inquiry, but they must be able to manage their knowledge within the forms and conventions of a given discipline--what constitutes a problem and what the accepted techniques are for solving a problem. Meaning making is a constructive process, one that is both social and cognitive, the product of a dialectical interaction that includes a discipline (i.e., its ways of knowing), and readers and writers who function within a given semantic field, an interaction mediated by language.

Rather than create dichotomies between social and cognitive theories that leave us with impoverished accounts of the writing process, we need to see how different kinds of knowledge work together. Specifically, we need to look at the ways social context cues action and guides cognition, the ways individuals summon prior knowledge, or the ways individual

members in a discipline acquire discourse knowledge, construe purpose, or make a contribution to the growth of knowledge in a field. In doing so, we need, as Flower argues, to"create a vision that is grounded in specific knowledge about real people writing in significant personal, social, and political situations" ("Cognition, Context" 283). And, as a consequence of developing informed theories about how individuals construct knowledge, we will be in a better position to teach the students the kind of knowledge that will enable them to weigh options and choices, to think critically, to become agents.

TOWARD A DIALECTICAL THEORY OF COMPOSING

A cognitive-social epistemic is a construct that values the historically and ideologically constructed nature of knowledge, as well as the critical role that individuals play in the construction of meaning. And embedded in a cognitive-social epistemic, or dialectical conception of theory, are three principles that I mentioned earlier. These principles emphasize *systematic inquiry* and *reflexivity* in both theory and research, thus setting forth a framework for critique. First, the development of such a construct depends in large part on fine-grained observations of the processes we are interested in, observations that are meaningful to both teachers and researchers. Toward this end, textual and historical studies in the sociology of knowledge demonstrate the power of social structures to shape, if not circumscribe, thought and action. This body of research also shows the power of agency in constructing knowledge within the scientific community. Nonetheless, this work provides only provisional knowledge on which to base any theoretical construct that seeks to explain the construction of knowledge in a form that would be most useful to educators. Textual and historical studies provide one perspective, as would naturalistic or protocol studies of scientists reading journal articles in light of their own purposes as writers. Together, these methods provide multiple perspectives from which to derive theories of knowledge.

Again, the issue in this article is not a matter of what a theory lacks, but whether a theory provides a descriptive and plausible framework for human understanding that can be supported. One could argue, for example, that Bazerman's conceptions of community, conversation, and contribution reflect a functionalist theory of knowledge construction that is insulated from issues of resistance and the like. Indeed, he ignores the ideological issues Myers addresses and those issues which social theorists in composition privilege. Instead, he chooses to focus on how individuals orchestrate their contributions within a given community. Ideologically, the theories that drive Myers' and Bazerman's work may be in conflict--Marxist versus functionalist--but they are also mutually informing. They stand in a dialectical relation to one another, each calling into question the "findings" of the other, paving the way for further inquiry and explanation. The second principle follows from these observations: the adequacy of our explanations can be measured by the extent to which our theories reflect the social contexts we study, not by the extent to which theories reflect political arguments about the nature of knowledge. It follows, then, that developing a synthetic construct like a cognitive-social epistemic also depends upon critical inspection of the interests and methods that drive our research.

As a further illustration, we might consider the issue of authority and resistance that social theorists have raised in the context of writing instruction (see, for example, Chase). A given assumption is that authority describes a set of power relations between an individual student and a teacher or an institution or a text. From one perspective, students assume a subservient role to the authority of textual sources and the teacher, each governing students' selective attention in reading and writing. Yet, from another perspective, authority is something students bring to a writing task as they actively construct a task, using prior knowledge of a subject and what it means to write in school, and forming their own goals as readers and writers. Seen in this way, a task prompts an interpretive act that guides a set of actions within a given context. Writers assert authority as they set goals, weigh options, knowing what strategies to use to carry out a task and why these strategies might be most appropriate in a given situation. Of course, students often find ways to subvert or resist the tasks they are given, a form of authority that many teachers applaud as a willingness to take risks and challenge institutional

authority by stepping out of the bounds of a given task.

To an extent, many of these assertions addressing the issue of authority are based on mere speculation. In this, they are problematic. As teachers who want students to assume authority in their writing, how do we translate these different explanations of authority as acts of resistance, goal setting, and knowledge construction into actions that we can take to foster students' abilities to take authority? My own research, set in the context of a junior-level history course, addresses the notion of authority in terms of constructivist theories of reading and writing (for a review of the literature, see Spivey, "Transforming"). This study suggests that students' willingness to assert their authority over a body of information is influenced by the nature of the task they are given. I am finding that students writing content-based reports on the issues surrounding European recovery after WWII relied on the primary and secondary sources they were given to present information, and to structure and support an argument more so than students writing problem-based essays. This problem-based group was asked to propose conditions and options that might have been more sensitive to U.S. and West European needs than were originally proposed by policy-makers in 1947-8. In response to the task, they added more ideas that were not mentioned in the sources than did the content-based group and made more inferences using the information they were given. Moreover, students in the problem-based group cited authorities in order to challenge accepted positions, support claims in forming arguments, or locate faulty paths made by authors in the source texts in order to contribute their own ideas. The report group tended to rely on authorities as a source of content.

Such a study not only suggests that different tasks provide students with different opportunities for assuming authority in writing, but also describes the nature of this authority in terms of specific kinds of discourse knowledge, such as finding ways to balance a need to be accountable to the canonical knowledge developed in a field over time with a desire to contribute novel ideas to an ongoing discussion. The issue for teachers, then, is how do we teach students to make the appropriate decisions about how to strike such a balance, asserting their own authority in meaningful ways at all levels of discourse? Of course, such a study provides only a partial account in developing an understanding of authority in writing. At the same time, it provides direction for additional research that can either support this work or provide rival hypotheses to explain how students assume authority or resist school-writing tasks (cf. Flower, "Cognition, Context").

The key point is that we need richly specified descriptions that can provide an increased understanding of how authority and resistance manifest themselves in students' attempts to perform academic tasks, how institutional authority affects learning, and what it means to assume power and achieve voice. More generally, we need fine-grained descriptions of how context guides cognition and the role that individual cognition plays in the social negotiation of knowledge based on informed theories about the specific phenomenon that interest us. In turn, our observations "should lead to further modification," encouraging both exploration and construction, without privileging one methodology or set of theoretical assumptions (Flower, "Cognition, Context").

Employing methods that include protocol analysis, ethnomethodology, experimental designs, text analysis, and discourse-based interviews, researchers have begun to provide descriptive accounts of how writers negotiate complex and varied writing tasks in context, descriptions that are provisional, but nonetheless provide specific accounts of the ways in which knowledge is socially constructed. To make the best use of this research, we must avoid naive readings of findings, evidence, and results that contribute to creating dichotomies and reductive accounts of different theories. Instead, we should see research as a systematic way to create meaning, structure search into the ways individuals construct knowledge, and open dialogue between competing theories of knowledge. By opening up dialogue, teachers who stand at the crossroads in composition will not be forced to decide whether to teach from a social or cognitive perspective, but understand more fully the extent to which their students are cognitive-social meaning makers.

Notes

[1]I especially want to thank Linda Flower and Lorraine Higgins for their thoughtful and supportive comments on earlier drafts.

[2]I am primarily concerned with the culture of school--as opposed to community-based literacy--the legacy of schooling that students bring to tasks of composing and comprehending, and the kind of knowledge learners need to have in order to both contribute and create change in the context of school. For the purposes of this article, literate practice consists of knowing the social processes that give meaning to our lives and developing knowledge that enables one to transform a set of givens into a problematic situation, set goals and criteria that structure inquiry, and recognize the constraints that influence the production and dissemination of discourse in a given community. In addition, literacy consists of having an awareness of how meaning is constructed. Such knowledge has the potential to enable learners to make conscious choices about how to negotiate the demands and expectations of an academic community, and to bring at-risk students in from the margins.

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